

Evaluation of Tendovo for Residual Weed Control and Crop Safety (Janesville, WI 2022)

Trial Information

Trial Sponsor(s): Syngenta

Objective: Compare the residual weed control and crop safety of Tendovo* to other Syngenta and competitor PRE soybean herbicides

Crop: XtendFlex Soybean

Variety: AG20XF1

Weed species (pressure): giant ragweed (high-very high)
lambsquarters (moderate)

Herbicide Application(s): PRE – 5/17
POST – 6/13 (V1 soybean)
LPOST – 7/7 (V6 soybean)

***Tendovo 4.14 ZC** is a new premix offering from Syngenta containing 3.33 lb/gal S-metolachlor; 0.64 lb/gal metribuzin; and 0.06 lb/gal cloransulam.

For the full report see trial #22-ROK-SB09 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

syngenta

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Trt #	Herbicide (rate acre ⁻¹)	Giant Ragweed (%)				Lambsquarters (%)				Yield ^b bu acre ⁻¹
		6/13	6/28	7/7	10/11	6/13	6/28	7/7	10/11	
1	Untreated Check	0	0	0	0	0	0	0	0	0 e
	Three-Pass – PRE (5/17) fb POST (6/13) fb LPOST (7/7)		POST		LPOST		POST		LPOST	
	Tendovo (1.75 QT) fb									
2	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	51	89	78	92	100	100	100	100	69.7 bcd
	Tendovo (2.1 qt) fb									
3	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	69	91	81	96	100	100	100	100	74.9 a
	Boundary (1.8 pt) fb									
4	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	0	87	87	80	100	100	100	100	67.2 d
	Broadaxe XC (25 fl oz) fb									
5	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	0	88	85	85	100	100	100	100	68.9 cd
	Sonic (6.45 oz) fb									
6	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	72	87	74	94	100	100	100	100	71.8 abc
	Fierce XLT (4.5 oz) fb									
7	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	58	89	77	96	100	100	99	100	73.4 ab
	Zidua PRO (6 fl oz) fb									
8	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	71	90	76	93	100	100	100	100	72.6 abc
	Authority Edge (9 fl oz) fb									
9	Tavium (3.53 pt) + Roundup PM3 (30 fl oz)* fb Liberty (32 fl oz) + AMS (2 lb)	5	88	82	90	100	100	99	100	70.9 a-d
	LSD ($\alpha=0.10$)	13	ns	5	7	ns	ns	ns	ns	4.4
	p value	<.001	0.261	0.002	0.004	1.00	0.583	0.578	1.00	<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bYield values with the same letter are not significantly different.

*VaporGrip Xtra (20 fl oz/a) + Intact at 0.5% v/v + Class Act Ridion at 1% v/v was included in the first POST application of Tavium + Roundup PM3

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Plot pictures taken on 6/7
21 days after the PRE application

21 days after PRE (6/7)
Untreated Check



**21 days after PRE (6/7)
PRE: 1.75 qt Tendovo**



21 days after PRE (6/7)
PRE: 2.1 qt Tendovo



**21 days after PRE (6/7)
PRE: 1.8 pt Boundary**



**21 days after PRE (6/7)
PRE: 25 fl oz Broadaxe XC**



21 days after PRE (6/7)

PRE: 6.45 oz Sonic



**21 days after PRE (6/7)
PRE: 4.5 oz Fierce XLT**



**21 days after PRE (6/7)
PRE: 6 fl oz Zidua PRO**



**21 days after PRE (6/7)
PRE: 9 fl oz Authority Edge**



Evaluation of Tendovo for Residual Weed Control and Crop Safety (Janesville, WI 2022)

Plot pictures taken on 6/13

27 days after the PRE application
The day of the POST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

27 days after PRE (6/13)

Untreated Check

0%



27 days after PRE (6/13)

PRE: 1.75 qt Tendovo

51%



27 days after PRE (6/13)

PRE: 2.1 qt Tendovo

69%



**27 days after PRE (6/13)
PRE: 1.8 pt Boundary**

0%



**27 days after PRE (6/13)
PRE: 25 fl oz Broadaxe XC**

0%



27 days after PRE (6/13)

PRE: 6.45 oz Sonic

72%



27 days after PRE (6/13)

PRE: 4.5 oz Fierce XLT

58%



27 days after PRE (6/13)

PRE: 6 fl oz Zidua PRO

71%



**27 days after PRE (6/13)
PRE: 9 fl oz Authority Edge**

5%



Evaluation of Tendovo for Residual Weed Control and Crop Safety (Janesville, WI 2022)

Plot pictures taken on 6/28

42 days after the PRE application
15 days after the POST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

42 days after PRE (6/28)

Untreated Check

0%



15 days after POST (6/28)

PRE: 1.75 qt Tendovo *fb*

89%

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion



15 days after POST (6/28)

PRE: 2.1 qt Tendovo *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

91%



15 days after POST (6/28)

PRE: 1.8 pt Boundary *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

87%



15 days after POST (6/28)

PRE: 25 fl oz Broadaxe XC *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

88%



15 days after POST (6/28)

PRE: 6.45 oz Sonic *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

87%



15 days after POST (6/28)

PRE: 4.5 oz Fierce XLT fb

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

89%



15 days after POST (6/28)

PRE: 6 fl oz Zidua PRO *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

90%



15 days after POST (6/28)

PRE: 9 fl oz Authority Edge *fb*

88%

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion



Evaluation of Tendovo for Residual Weed Control and Crop Safety (Janesville, WI 2022)

Plot pictures taken on 7/7

51 days after the PRE application

24 days after the POST application

The day of the LPOST application

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

51 days after PRE (7/7)

Untreated Check

0%



24 days after POST (7/7)

PRE: 1.75 qt Tendovo *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

78%



24 days after POST (7/7)

PRE: 2.1 qt Tendovo *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

81%



24 days after POST (7/7)

PRE: 1.8 pt Boundary *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

87%



24 days after POST (7/7)

PRE: 25 fl oz Broadaxe XC *fb*

85%

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion



24 days after POST (7/7)

PRE: 6.45 oz Sonic *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

74%



24 days after POST (7/7)

PRE: 4.5 oz Fierce XLT *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

77%



24 days after POST (7/7)

PRE: 6 fl oz Zidua PRO fb

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

76%



24 days after POST (7/7)
PRE: 9 fl oz Authority Edge *fb*
POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion

82%



Evaluation of Tendovo for Residual Weed Control and Crop Safety (Janesville, WI 2022)

Plot pictures taken on 10/11
The day of soybean harvest

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

Soybean harvest (10/11)

Untreated Check

0%



Soybean harvest (10/11)

PRE: 1.75 qt Tendovo *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

92%



Soybean harvest (10/11)

PRE: 2.1 qt Tendovo *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

96%



Soybean harvest (10/11)

PRE: 1.8 pt Boundary *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

80%



Soybean harvest (10/11)

PRE: 25 fl oz Broadaxe XC *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

85%



Soybean harvest (10/11)

PRE: 6.45 oz Sonic *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

94%



Soybean harvest (10/11)

PRE: 4.5 oz Fierce XLT *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

96%



Soybean harvest (10/11)

PRE: 6 fl oz Zidua PRO *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

93%



Soybean harvest (10/11)

PRE: 9 fl oz Authority Edge *fb*

POST: 3.53 pt Tavium + 30 fl oz Roundup PM3 + 1% v/v Class Act Ridion *fb*

LPOST: 32 fl oz Liberty + 2 lb AMS

90%

